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MEMC 99-3590 (2702) PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Hariprasad Sreedharamurthy, et al. Art Unit 1765
Serial No. 09/757,121
Filed January 9, 2001
Confirmation No. 6581
For CRYSTAL PULLER AND METHOD FOR GROWING SINGLE CRYSTAL
SEMICONDUCTOR MATERIAL

October 16, 2002

RESPONSE A

TO THE ASSISTANT COMMISSIONER FOR PATENTS, Washington, D.C. 20231

SIR:

In response to the Office action mailed July 16, 2002, please enter the following remarks:

General Considerations

The present invention relates to a crystal puller having a susceptor assembly for increasing the useful life of a susceptor disposed in the crystal puller. In conventional crystal pullers, the susceptor is made of two or more pieces of graphite to allow for expansion and contraction of the quartz crucible held in the susceptor. As a result of the multiple piece construction of the susceptor, there is often a small gap along the seam, or seams, where the susceptor pieces come together. Also, due to manufacturing specifications and tolerances associated with the manufacture of crucibles and susceptors, the crucible may not always seat within the susceptor in close contact with the entire inner surface of the susceptor. As a result, there may also be one or more gaps between the outer surface of the crucible side